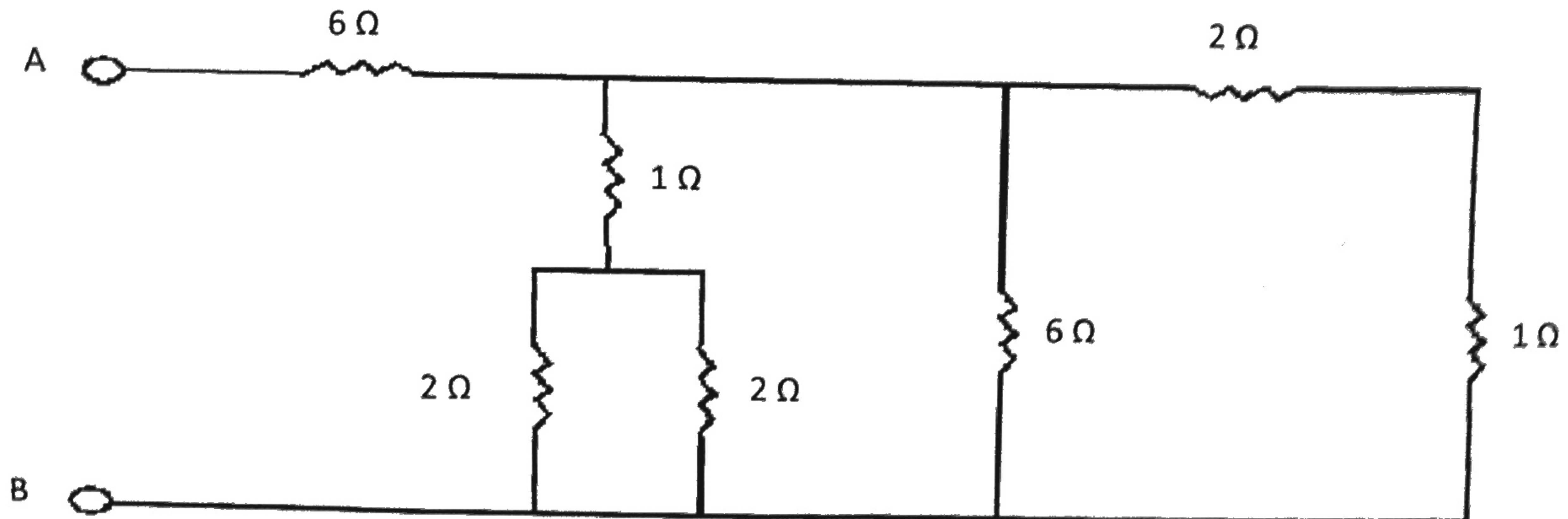


Lab 5 Homework

1. To measure current passing through a resistor, how must you connect the DMM? Draw a picture for a circuit containing a battery, one resistor, and the DMM.
2. To measure a voltage across a resistor, how must you connect the DMM? Draw a picture of this for a circuit containing a battery, one resistor, and the DMM.
3. Find the equivalent resistance across the terminals A B.



4. If you have a simple circuit which consists of two batteries, a DMM, and a resistor, tell me 3 ways it would be possible to measure a negative current through the resistor. The voltage of one battery is much greater than the other.
5. If you were to do a detailed analysis of a circuit, why might it be important to measure the actual resistance of the resistors in use instead of relying on the color coded bands to tell you?

Challenge Questions

6. Find the current that is leaving the battery and the voltage drop across the $6\text{k}\Omega$ resistor. (From the diagram provided)

$2\text{ k}\Omega$